

## WHAT IS CLAIMED IS:

1. A method for call forwarding synchronization, comprising:

allowing a telephone subsystem to forward calls for a telephonic device to a first call forwarding destination;

allowing a wireless subsystem to forward calls for a mobile station to a second call forwarding destination, the mobile station associated with the telephonic device;

determining a registration state of the mobile station; and

synchronizing the call forwarding destinations for the mobile station and the telephonic device in response to a change to at least one of the registration state, the first call forwarding destination, and the second call forwarding destination.

2. The method of Claim 1, wherein the first call forwarding destination is not set before registration of the mobile station; and

wherein synchronizing the call forwarding destinations comprises:

instructing the telephone subsystem upon registration of the mobile station to set the first call forwarding destination to the mobile station; and

instructing the wireless subsystem to clear the second call forwarding destination.

3. The method of Claim 1, wherein the first call forwarding destination is set to a destination other than the mobile station before registration of the mobile station; and

wherein synchronizing the call forwarding destinations comprises instructing the wireless subsystem upon registration of the mobile station to set the second call forwarding destination to the same destination as the first call forwarding destination.

4. The method of Claim 1, wherein the second call forwarding destination is set to a destination other than the telephonic device after registration of the mobile station; and

wherein synchronizing the call forwarding destinations comprises instructing the telephone subsystem to set the first call forwarding destination to the same destination as the second call forwarding destination.

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5. The method of Claim 1, wherein the first call forwarding destination is set to a destination other than the mobile station after registration of the mobile station; and

wherein synchronizing the call forwarding destinations comprises instructing the wireless subsystem to set the second call forwarding destination to the same destination as the first call forwarding destination.

6. The method of Claim 1, wherein the second call forwarding destination is cleared after registration of the mobile station; and

wherein synchronizing the call forwarding destinations comprises instructing the telephone subsystem to set the first call forwarding destination to the mobile station.

7. The method of Claim 1, wherein the first call forwarding destination is cleared after registration of the mobile station; and

wherein synchronizing the call forwarding destinations comprises:

starting a timer;

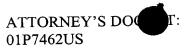
instructing the telephone subsystem to set the first call forwarding destination to the mobile station and instructing the wireless subsystem to clear the second call forwarding destination if a new destination is not provided before the timer elapses; and

instructing the telephone subsystem to set the first call forwarding destination to the new destination and instructing the wireless subsystem to set the second call forwarding destination to the same destination as the first call forwarding destination if the new destination is provided before the timer elapses.

8. The method of Claim 1, wherein synchronizing the call forwarding destinations comprises:

determining upon deregistration of the mobile station if the first call forwarding destination is set to the mobile station; and

instructing the telephone subsystem to clear the first call forwarding destination if the first call forwarding destination is set to the mobile station.



A system for call forwarding synchronization, comprising: at least one computer processable medium; and

logic encoded on the at least one computer processable medium and operable to:

allow a telephone subsystem to forward calls for a telephonic device to a first call forwarding destination;

allow a wireless subsystem to forward calls for a mobile station to a second call forwarding destination, the mobile station associated with the telephonic device;

determine a registration state of the mobile station; and

synchronize the call forwarding destinations for the mobile station and the telephonic device in response to a change to at least one of the registration state, the first call forwarding destination, and the second call forwarding destination.

The system of Claim 9, wherein the first call forwarding destination is not set 10. before registration of the mobile station; and

wherein the logic is operable to synchronize the call forwarding destinations by:

instructing the telephone subsystem upon registration of the mobile station to set the first call forwarding destination to the mobile station; and

instructing the wireless subsystem to clear the second call forwarding destination.

The system of Claim 9, wherein the first call forwarding destination is set to a 11. destination other than the mobile station before registration of the mobile station; and

wherein the logic is operable to synchronize the call forwarding destinations by instructing the wireless subsystem upon registration of the mobile station to set the second call forwarding destination to the same destination as the first call forwarding destination.

The system of Claim 9, wherein the second call forwarding destination is set 12. to a destination other than the telephonic device after registration of the mobile station; and

wherein the logic is operable to synchronize the call forwarding destinations by instructing the telephone subsystem to set the first call forwarding destination to the same destination as the second call forwarding destination.

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13. The system of Claim 9, wherein the first call forwarding destination is set to a destination other than the mobile station after registration of the mobile station; and

wherein the logic is operable to synchronize the call forwarding destinations by instructing the wireless subsystem to set the second call forwarding destination to the same destination as the first call forwarding destination.

14. The system of Claim 9, wherein the second call forwarding destination is cleared after registration of the mobile station; and

wherein the logic is operable to synchronize the call forwarding destinations by instructing the telephone subsystem to set the first call forwarding destination to the mobile station.

15. The system of Claim 9, wherein the first call forwarding destination is cleared after registration of the mobile station; and

wherein the logic is operable to synchronize the call forwarding destinations by: starting a timer;

instructing the telephone subsystem to set the first call forwarding destination to the mobile station and instructing the wireless subsystem to clear the second call forwarding destination if a new destination is not provided before the timer elapses; and

instructing the telephone subsystem to set the first call forwarding destination to the new destination and instructing the wireless subsystem to set the second call forwarding destination to the same destination as the first call forwarding destination if the new destination is provided before the timer elapses.

16. The system of Claim 9, wherein the logic is operable to synchronize the call forwarding destinations by:

determining upon deregistration of the mobile station if the first call forwarding destination is set to the mobile station; and

instructing the telephone subsystem to clear the first call forwarding destination if the first call forwarding destination is set to the mobile station.



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17. A system for call forwarding synchronization, comprising:

a telephone subsystem operable to communicate with a telephonic device, the telephone subsystem also operable to forward calls for the telephonic device to a first call forwarding destination; and

a wireless subsystem operable to communicate with a mobile station, the mobile station associated with the telephonic device, the wireless subsystem also operable to forward calls for the mobile station to a second call forwarding destination, the wireless subsystem further operable to determine a registration state of the mobile station and to synchronize the call forwarding destinations for the mobile station and the telephonic device in response to a change to at least one of the registration state, the first call forwarding destination, and the second call forwarding destination.

18. The system of Claim 17, wherein the first call forwarding destination is not set before registration of the mobile station; and

wherein the wireless subsystem is operable to synchronize the call forwarding destinations by:

instructing the telephone subsystem upon registration of the mobile station to set the first call forwarding destination to the mobile station; and

clearing the second call forwarding destination.

19. The system of Claim 17, wherein the first call forwarding destination is set to a destination other than the mobile station before registration of the mobile station; and

wherein the wireless subsystem is operable to synchronize the call forwarding destinations by setting the second call forwarding destination to the same destination as the first call forwarding destination upon registration of the mobile station.

20. The system of Claim 17, wherein the second call forwarding destination is set to a destination other than the telephonic device after registration of the mobile station; and

wherein the wireless subsystem is operable to synchronize the call forwarding destinations by instructing the telephone subsystem to set the first call forwarding destination to the same destination as the second call forwarding destination.



21. The system of Claim 17, wherein the first call forwarding destination is set to a destination other than the mobile station after registration of the mobile station; and

wherein the wireless subsystem is operable to synchronize the call forwarding destinations by setting the second call forwarding destination to the same destination as the first call forwarding destination.

22. The system of Claim 17, wherein the second call forwarding destination is cleared after registration of the mobile station; and

wherein the wireless subsystem is operable to synchronize the call forwarding destinations by instructing the telephone subsystem to set the first call forwarding destination to the mobile station.

23. The system of Claim 17, wherein the first call forwarding destination is cleared after registration of the mobile station; and

wherein the wireless subsystem is operable to synchronize the call forwarding destinations by:

starting a timer;

instructing the telephone subsystem to set the first call forwarding destination to the mobile station and clearing the second call forwarding destination if a new destination is not provided before the timer elapses; and

instructing the telephone subsystem to set the first call forwarding destination to the new destination and setting the second call forwarding destination to the same destination as the first call forwarding destination if the new destination is provided before the timer elapses.

24. The system of Claim 17, wherein the wireless subsystem is operable to synchronize the call forwarding destinations by:

determining upon deregistration of the mobile station if the first call forwarding destination is set to the mobile station; and

instructing the telephone subsystem to clear the first call forwarding destination if the first call forwarding destination is set to the mobile station.

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- 25. The system of Claim 17, wherein the wireless subsystem comprises:
- a base station operable to communicate with the mobile station;
- a wireless adjunct internet platform operable to communicate with the base station;
- a gateway operable to communicate with the wireless adjunct internet platform and the telephone subsystem; and
  - a gatekeeper operable to generate signaling messages to control the telephone subsystem.
    - 26. The system of Claim 25, wherein:

the telephone subsystem comprises a private branch exchange;

the wireless adjunct internet platform is operable to communicate with the mobile station through the base station using a Global System for Mobile communication (GSM) standard; and

the wireless adjunct internet platform, the gateway, and the gatekeeper communication using an International Telecommunications Union-Telecommunications (ITU-T) H.323 standard.



 $2^{\hat{7}}$ . A method for call forwarding synchronization, comprising:

allowing a telephone subsystem to forward calls for a telephonic device to a first call forwarding destination;

allowing a wireless subsystem to forward calls for a mobile station to a second call forwarding destination, the mobile station associated with the telephonic device;

determining a registration state of the mobile station;

instructing the telephone subsystem upon registration of the mobile station to set the first call forwarding destination to the mobile station and instructing the wireless subsystem to clear the second call forwarding destination if the first call forwarding destination is not set;

instructing the wireless subsystem upon registration of the mobile station to set the second call forwarding destination to the same destination as the first call forwarding destination if the first call forwarding destination is set to a destination other than the mobile station;

instructing the telephone subsystem to set the first call forwarding destination to the same destination as the second call forwarding destination if the second call forwarding destination is set to a destination other than the telephonic device after registration of the mobile station;

instructing the wireless subsystem to set the second call forwarding destination to the same destination as the first call forwarding destination if the first call forwarding destination is set to a destination other than the mobile station after registration of the mobile station;

instructing the telephone subsystem to set the first call forwarding destination to the mobile station if the second call forwarding destination is cleared after registration of the mobile station;

instructing the telephone subsystem to set the first call forwarding destination to the mobile station and instructing the wireless subsystem to clear the second call forwarding destination if a new destination is not provided before a timer elapses when the first call forwarding destination is cleared after registration of the mobile station;

instructing the telephone subsystem to set the first call forwarding destination to a new destination and instructing the wireless subsystem to set the second call forwarding destination to the same destination as the first call forwarding destination if a new destination

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is provided before the timer elapses when the first call forwarding destination is cleared after registration of the mobile station; and

instructing the telephone subsystem upon deregistration of the mobile station to clear the first call forwarding destination if the first call forwarding destination is set to the mobile station.



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28. A system for call forwarding synchronization, comprising:

at least one computer processable medium; and

logic encoded on the at least one computer processable medium and operable to:

allow a telephone subsystem to forward calls for a telephonic device to a first call forwarding destination;

allow a wireless subsystem to forward calls for a mobile station to a second call forwarding destination, the mobile station associated with the telephonic device;

determine a registration state of the mobile station;

instruct the telephone subsystem upon registration of the mobile station to set the first call forwarding destination to the mobile station and instructing the wireless subsystem to clear the second call forwarding destination if the first call forwarding destination is not set;

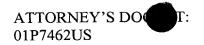
instruct the wireless subsystem upon registration of the mobile station to set the second call forwarding destination to the same destination as the first call forwarding destination if the first call forwarding destination is set to a destination other than the mobile station;

instruct the telephone subsystem to set the first call forwarding destination to the same destination as the second call forwarding destination if the second call forwarding destination is set to a destination other than the telephonic device after registration of the mobile station;

instruct the wireless subsystem to set the second call forwarding destination to the same destination as the first call forwarding destination if the first call forwarding destination is set to a destination other than the mobile station after registration of the mobile station;

instruct the telephone subsystem to set the first call forwarding destination to the mobile station if the second call forwarding destination is cleared after registration of the mobile station;

instruct the telephone subsystem to set the first call forwarding destination to the mobile station and instructing the wireless subsystem to clear the second call forwarding destination if a new destination is not provided before a timer elapses when the first call forwarding destination is cleared after registration of the mobile station;





instruct the telephone subsystem to set the first call forwarding destination to a new destination and instructing the wireless subsystem to set the second call forwarding destination to the same destination as the first call forwarding destination if a new destination is provided before the timer elapses when the first call forwarding destination is cleared after registration of the mobile station; and

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instruct the telephone subsystem upon deregistration of the mobile station to clear the first call forwarding destination if the first call forwarding destination is set to the mobile station.

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- 29. A system for call forwarding synchronization, comprising:
- a telephone subsystem operable to communicate with a telephonic device, the telephone subsystem also operable to forward calls for the telephonic device to a first call forwarding destination;
- a wireless subsystem operable to communicate with a mobile station, the mobile station associated with the telephonic device, the wireless subsystem comprising:
- a base station operable to communicate with the mobile station over a wireless interface;
- a wireless adjunct internet platform operable to communicate with the base station;
- a gateway operable to communicate with the wireless adjunct internet platform and the telephone subsystem;
- a gatekeeper operable to forward calls for the mobile station to a second call forwarding destination and to determine a registration state of the mobile station;

the gatekeeper operable to instruct the telephone subsystem upon registration of the mobile station to set the first call forwarding destination to the mobile station and to clear the second call forwarding destination if the first call forwarding destination is not set;

the gatekeeper operable upon registration of the mobile station to set the second call forwarding destination to the same destination as the first call forwarding destination if the first call forwarding destination is set to a destination other than the mobile station;

the gatekeeper operable to instruct the telephone subsystem to set the first call forwarding destination to the same destination as the second call forwarding destination if the second call forwarding destination is set to a destination other than the telephonic device after registration of the mobile station;

the gatekeeper operable to set the second call forwarding destination to the same destination as the first call forwarding destination if the first call forwarding destination is set to a destination other than the mobile station after registration of the mobile station;

the gatekeeper operable to instruct the telephone subsystem to set the first call forwarding destination to the mobile station if the second call forwarding destination is cleared after registration of the mobile station;



the gatekeeper operable to instruct the telephone subsystem to set the first call forwarding destination to the mobile station and to clear the second call forwarding destination if a new destination is not provided before a timer elapses when the first call forwarding destination is cleared after registration of the mobile station;

the gatekeeper operable to instruct the telephone subsystem to set the first call forwarding destination to a new destination and to set the second call forwarding destination to the same destination as the first call forwarding destination if a new destination is provided before the timer elapses when the first call forwarding destination is cleared after registration of the mobile station; and

the gatekeeper operable to instruct the telephone subsystem upon deregistration of the mobile station to clear the first call forwarding destination if the first call forwarding destination is set to the mobile station.



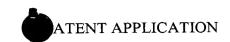
- 30. A system for call forwarding synchronization, comprising:
- a telephone subsystem operable to communicate with a telephonic device, the telephone subsystem also operable to forward calls for the telephonic device to a first call forwarding destination;
- a client operable to communicate with the telephonic subsystem, the client associated with the telephonic device;
  - a gateway operable to communicate with the client; and
- a gatekeeper operable to instruct the gateway to forward calls for the client to a second call forwarding destination, the gatekeeper also operable to determine an activation state of the client and to synchronize the call forwarding destinations for the telephonic device and the client in response to a change to at least one of the activation state, the first call forwarding destination, and the second call forwarding destination.
  - The system of Claim 30, wherein:

the client comprises a gateway to a wireless subsystem, the wireless subsystem operable to communicate with a mobile station;

the client activates when the mobile station registers with the wireless subsystem; and the client deactivates when the mobile station deregisters with the wireless subsystem.

32. The system of Claim 30, wherein the client comprises at least one of a voice over packet telephone, a computing device, and a gateway operable to communicate with another communication system.





33. A method for call forwarding synchronization, comprising:

allowing a telephone subsystem to forward calls for a telephonic device to a first call forwarding destination;

allowing a gateway to forward calls for a client to a second call forwarding destination, the client associated with the telephonic device;

determining an activation state of the client; and

synchronizing the call forwarding destinations for the telephonic device and the client in response to a change to at least one of the activation state, the first call forwarding destination, and the second call forwarding destination.

34. The method of Claim 33, wherein:

the client comprises a gateway to a wireless subsystem, the wireless subsystem operable to communicate with a mobile station;

the client activates when the mobile station registers with the wireless subsystem; and the client deactivates when the mobile station deregisters with the wireless subsystem.

35. The method of Claim 33, wherein the client comprises at least one of a voice over packet telephone, a computing device, and a gateway operable to communicate with another communication system.

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36. A system for call forwarding synchronization, comprising: at least one computer processable medium; and

logic encoded on the at least one computer processable medium and operable to:

allow a telephone subsystem to forward calls for a telephonic device to a first call forwarding destination;

allow a gateway to forward calls for a client to a second call forwarding destination, the client associated with the telephonic device;

determine an activation state of the client; and

synchronize the call forwarding destinations for the telephonic device and the client in response to a change to at least one of the activation state, the first call forwarding destination, and the second call forwarding destination.

37. The system of Claim 36, wherein:

the client comprises a gateway to a wireless subsystem, the wireless subsystem operable to communicate with a mobile station;

the client activates when the mobile station registers with the wireless subsystem; and the client deactivates when the mobile station deregisters with the wireless subsystem.

38. The system of Claim 36, wherein the client comprises at least one of a voice over packet telephone, a computing device, and a gateway operable to communicate with another communication system.